

**2012 – 2013**

**Arkansas Department of Career Education  
Model Framework**

**Course Title:** Introduction to Culinary Arts

**Career Cluster:** Hospitality & Tourism

Course Number	493250
Credit	.5
CIP Number	120500
Grade Level	9-12
Prerequisite	None
Course Type	Core
Teacher Certification	090 Family & Consumer Science 091 Vocational Home Economics 215 Family & Consumer Science 580 Culinary Arts & Chef Preparation 598 Food Production, Management & Services
CTSO	FCCLA
Facility Requirements	<a href="http://arkansasfacilities.arkansas.gov/SchoolFacManual.aspx">http://arkansasfacilities.arkansas.gov/SchoolFacManual.aspx</a>
Industry Certifications	<a href="http://www.servsafe.com/home">http://www.servsafe.com/home</a> <a href="http://arhospitality.org/education-training/online-food-handlers-course/">http://arhospitality.org/education-training/online-food-handlers-course/</a>

**Course Description**

Introduction to Culinary Arts is a semester course designed to introduce students to the culinary arts profession. Emphasis in this course is given to the development of basic competencies related to the culinary arts profession, basic menus and recipes, standardization and kitchen procedures. Upon completion of this course, students will be introduced to skills needed for employability, customer relations, menu planning, recipe use, weights and measures, conversions, budgeting, safety and sanitation, organizing for efficiency, and lab procedures.

**Program Structure**

[Click here to enter text.](#)

**Laboratory Activities**

Lab activities are infused into all areas of the curriculum

**Special Notes**

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**Career and Technical Student Organization (CTSO)**

Family, Career and Community Leaders of America (FCCLA)

**Standard 1.0 Developing the skills for the professional kitchen**

<b>Performance Indicator 1.1 Distinguish situations that require immediate hand washing when working with food</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
1.1.1 Apply proper hand washing techniques to avoid <b>cross-contamination</b> or <b>hazards</b> .	<ul style="list-style-type: none"> <li>Create a chart when proper hand washing should occur</li> </ul>	R11-12.3	HTRFB 2	FPS8.2
<b>Performance Indicator 1.2 Differentiate between cleaning and sanitizing surfaces to kill bacteria.</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
1.2.1 Investigate the use of sanitizing agents on various surfaces/equipment to prevent <b>direct contamination</b> .	<ul style="list-style-type: none"> <li>Prepare sanitation solutions using proper agents approved by health department</li> <li>Critique proper kitchen <b>sanitation</b> procedure</li> </ul>	R11-12.3 SL11-12.1	HTRFB 2	FPS8.2 FSDN9.2
<b>Performance Indicator 1.3 Develop guidelines for safe storage of sanitation agents</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
1.3.1 Design an orderly, accessible storage area for cleaning equipment	<ul style="list-style-type: none"> <li>Develop a chart for items stored in proper cleaning/chemical storage area</li> </ul>	SL11-12.4	HTRFB 2	FPS8.2 FSDN9.2

<b>Performance Indicator 1.4</b> <b>Examine occupational safety hazards related to food service</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
1.4.1 Apply knowledge of safe handling and use of equipment	<ul style="list-style-type: none"> <li>Explain proper use and handling of the following equipment:               <ul style="list-style-type: none"> <li>Large equipment:                   <ul style="list-style-type: none"> <li><b>Bench mixer</b></li> <li><b>Compartment steamer</b></li> <li><b>Convection oven</b></li> <li><b>Flat-top range</b></li> <li><b>Griddle-top range</b></li> <li><b>Stack oven</b></li> </ul> </li> <li>Small equipment                   <ul style="list-style-type: none"> <li><b>Baker's scale</b></li> <li><b>China cap</b></li> <li><b>Cleaver</b></li> <li><b>Colander</b></li> <li><b>Double boiler</b></li> <li><b>Dry measuring cups</b></li> <li><b>Food mill</b></li> <li><b>French whip</b></li> <li><b>Funnel</b></li> <li><b>Grater</b></li> <li><b>Ladle</b></li> <li><b>Liquid measuring cups</b></li> <li><b>Measuring spoons</b></li> <li><b>Paring knife</b></li> <li><b>Peeler</b></li> <li><b>Portion scale</b></li> <li><b>Proofing oven</b></li> <li><b>Roasting pan</b></li> <li><b>Sharpening stone</b></li> <li><b>Sharpening steel</b></li> <li><b>Sheet pan</b></li> </ul> </li> </ul> </li> </ul>	SL11-12.1 R11-12.1 L11-12.4	HTRFB 8	FPS8.2

	Skimmer Spatula Springform pan Stockpot Strainer Thermometer Whisk Zester Knives Boning knife Butcher knife Chef's knife Citrus knife Fruit and salad knife Serrated knife			
1.4.3 Integrate preparation techniques to promote safety	<ul style="list-style-type: none"> <li>Formulate a routine of safe use of cutting boards, knives, and foods</li> </ul>	SL11-12.1	HTRFB 2 HTRFB 8	FPS8.2
<b>Performance Indicator 1.5</b> <b>Examine emergency first aid procedures</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
1.5.1 Demonstrate emergency first aid procedures	<ul style="list-style-type: none"> <li>Apply concept of basic first aid for burns and cuts</li> <li>Use concept of <b>Heimlich Maneuver</b> for choking</li> </ul>	R11-12.3 SL11-12.4	HT 5	
<b>Performance Indicator 1.6</b> <b>Outline characteristics and prevention of foodborne illnesses</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
1.6.1 Formulate techniques for handling food to prevent foodborne illnesses	<ul style="list-style-type: none"> <li>Develop a plan utilizing techniques to prevent foodborne illnesses such as:  <b>Botulism, Salmonella, Shigellosis, Staphylococcus, Trichinosis</b> </li> </ul>	SL11-12.1 L11-12.6	HTRFB 2	FPS8.2

1.6.2 Cite evidence for criteria that determine an official outbreak of a foodborne illness	<ul style="list-style-type: none"> <li>Investigate information from the internet and newspapers regarding foodborne illness outbreaks</li> </ul>	R11-12.7	HTRFB 7	NW14.4 NW14.5
<b>Performance Indicator 1.7</b> <b>Ascertain conditions and factors necessary for growth of microorganisms</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
1.7.1 Assess the temperature range known as the “ <b>temperature danger zone</b> ” for holding foods	<ul style="list-style-type: none"> <li>Construct a graphic chart for various foods and equipment regarding the proper holding temperatures</li> <li>Show knowledge of using thermometers to check refrigerator, freezer, and hot food handling equipment</li> </ul>	SL11-12.4 R11-12.3	HTRFB 2	FPS8.2
1.7.2 Analyze the time it takes to heat liquid, semisolids, and solid foods to a temperature above the danger zone, using different methods	<ul style="list-style-type: none"> <li>Draw conclusions of how time is affected by the heating of liquid and solid foods to temperature above the temperature danger zone</li> </ul>	SL11-12.1 L11-12.4 R11-12.2	HTRFB 2	FPS8.2
<b>Performance Indicator 1.8</b> <b>Determine basic sources of contamination of food supplies</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
1.8.1 Classify basic sources of food contaminants such as <b>fungi</b> and <b>pesticides</b>	<ul style="list-style-type: none"> <li>Analyze procedures for identifying basic sources of food contaminants</li> </ul>	R11-12.8	HT 3 HTRFB 2	NW14.4 NW14.5 FSDN9.2

<b>Performance Indicator 1.9</b> <b>Outline characteristics of a well designed commercial kitchen</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
1.9.1 List characteristics of a well designed kitchen and discuss reasons for each	<ul style="list-style-type: none"> <li>Formulate a design of a well appointed kitchen to include: access to sanitation stations, efficient location of equipment, and adequate work surfaces</li> </ul>	SL11-12.1 R11-12.7	HTRFB 7	
1.9.2 Investigate reasons for equipment selection	<ul style="list-style-type: none"> <li>Develop a logical argument for certain types of equipment to be used in certain styles of kitchens</li> </ul>	SL11-12.1	HTRFB 7	
<b>Performance Indicator 1.10</b> <b>Identify the workflow areas in a commercial kitchen</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
1.10.1 Analyze the <b>workflow</b> areas and how <b>inventory</b> and <b>FIFO</b> operates in a commercial kitchen	<ul style="list-style-type: none"> <li>Draw conclusions on receiving and storage of foodstuffs from various suppliers</li> <li>Construct a timeline for FIFO procedures</li> </ul>	L11-12.4	HTRFB 2 HTRFB 5	
1.10.2 Create a list jobs to be completed in each area	<ul style="list-style-type: none"> <li>Distinguish person responsible for receiving and storing foods</li> </ul>	SL11-12.1	HTRFB 8 HTRFB 9	FPS8.1
1.10.3 Explain which chef is responsible for each area of the <b>kitchen brigade</b>	<ul style="list-style-type: none"> <li>* Construct a list of chefs and their responsibilities               <ul style="list-style-type: none"> <li><b>Executive chef</b></li> <li><b>Chef de Partie</b></li> <li><b>Chef de Cuisine</b></li> <li><b>Sous Chef</b></li> <li><b>Line Cook</b></li> <li><b>Poissonier</b></li> <li><b>Potager</b></li> <li><b>Grillardin</b></li> <li><b>Garde Manger</b></li> <li><b>Rotissier</b></li> <li><b>Saucier</b></li> </ul> </li> </ul>	SL11-12.1	HTRFB 9	FPS8.1

	<b>Patissier</b> <b>Friturier</b> <b>Tournant</b> <b>Boucher</b> Assorted others: <b>Area Chef, Short-order Cook, Institutional Cook, Pastry Chef</b>			
<b>Performance Indicator 1.11</b> <b>Demonstrate selecting, using, and maintaining food production equipment</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
1.11.1 Apply concepts using tools and equipment following safety procedures and <b>OSHA</b> requirements	<ul style="list-style-type: none"> <li>Distinguish a working knowledge of using tools and equipment following all safety procedures</li> </ul>	R11-12.7	HTRFB 9	FSDN9.2
1.11.2 Explain how to properly maintain and store tools and equipment	<ul style="list-style-type: none"> <li>Apply concepts of proper maintenance and storing of tools and equipment in kitchen</li> </ul>	R11-12.3	HTRFB 8	FSDN9.2
1.11.3 Recognize and discuss the types of professional hand tools and equipment	<ul style="list-style-type: none"> <li>Differentiate between professional and home hand tools and equipment showing differences between the two categories</li> </ul>	R11-12.1	HTRFB 7 CRP 8	
<b>Performance Indicator 1.12</b> <b>Demonstrate knowledge of stations and equipment in a commercial kitchen</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
1.12.1 Critique placement of stations with necessary equipment	<ul style="list-style-type: none"> <li>Compare how placement of equipment makes workflow more efficient</li> <li>Design a proper cooking line showing placement of equipment</li> </ul>	R11-12.7 SL11-12.5	CRP 8 HTRFB 8	



<b>Performance Indicator 1.13 Demonstrate basic food preparation</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
1.13.1 Analyze the components and explain the functions of each in a standardized recipe	<ul style="list-style-type: none"> <li>Classify the different parts of a recipe labeling each function</li> </ul>	R11-12.3 R11-12.4		NW14.3
1.13.2 Recognize equivalents for weights and measures	<ul style="list-style-type: none"> <li>Create a chart to show equivalent for weights and measures</li> </ul>	SL11-12.5	HTRFB 8	NW14.3
1.13.3 Assess rules for converting a standard recipe	<ul style="list-style-type: none"> <li>Formulate rules used to scale recipes to fit need</li> </ul>	R11-12.2	HTRFB 8	NW14.3
1.13.4 Interpret the rules for sequencing work for a recipe	<ul style="list-style-type: none"> <li>Use concepts to solve the problem of work sequencing when following a recipe by charting a timeline for food prep</li> </ul>	SL11-12.4	CRP 1	NW14.3
1.13.5 Apply <b>mise en place</b> in laboratory on a daily basis	<ul style="list-style-type: none"> <li>Apply concept of MEP as a standard kitchen routine</li> </ul>	L11-12.6	HTRFB 8	NW14.3
<b>Performance Indicator 1.14 Demonstrate planning process for production of standard product</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
1.14.1 Using a <b>standardized recipe</b> , critique plans for preparing a standard product	<ul style="list-style-type: none"> <li>Compare and contrast the benefits of using standard recipes for production of product by listing pro and con utilizing this method</li> </ul>	L11-12.6 SL11-12.4	CRP 8	FSDN9.3
1.14.2 Design steps for preparing a standard product	<ul style="list-style-type: none"> <li>Develop a procedure for making a standard product using standardized recipes</li> </ul>	R11-12.3	HTRFB 8	FSDN9.3
1.14.3 Evaluate results of lab	<ul style="list-style-type: none"> <li>Critique product in regard to desired outcome: taste, appearance, quality</li> </ul>	SL11-12.4		FSDN 9.3

<b>Standard 2.0 Basic menus and recipes used in the professional kitchen</b>				
<b>Performance Indicator 2.1 Explain influences on food choices</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
2.1.1 Compare social, emotional, cultural and physical reasons for food choices	<ul style="list-style-type: none"> <li>Summarize ideas that influence food choices where social, emotional, cultural, and physical factors take place</li> </ul>	SL11-12.4	HTRFB 3	NW14.1
<b>Performance Indicator 2.2 Explain how to use Dietary Guidelines for Americans to meet nutritional needs</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
2.2.1 Describe proper nutrition using the <b>Dietary Guidelines for Americans</b>	<ul style="list-style-type: none"> <li>Identify various menu items regarding dietary guidelines such as <b>RDA</b>, <b>low sodium</b> and <b>low fat</b>.</li> </ul>	L11-12.4	HTRFB 3 CRP 3	FSDN9.3 NW14.2
<b>Performance Indicator 2.3 Describe different menu types</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
2.3.1 Differentiate menu types to their correct terms such as <b>A la carte</b> , <b>Entrée</b> , <b>Prix fixe</b> , and <b>Heart Healthy</b>	<ul style="list-style-type: none"> <li>Compare different menus showing different layouts, different styles, and different <b>cuisine</b> types</li> </ul>	L11-12.6	HTRFB 10	

<b>Performance Indicator 2.4 Identify influences on menus</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
2.4.1 Discuss social, economic, and seasonal reasons for menu selections	<ul style="list-style-type: none"> <li>Compare and contrast social, economic, seasonal, and cultural cuisine influences.</li> </ul>	SL11-12.1 L11-12.4	HTRFB 3	NW14.1
<b>Performance Indicator 2.5 List guidelines for developing a well balanced menu</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
2.5.1 Apply concepts for developing a well balanced menu	<ul style="list-style-type: none"> <li>Use concepts of nutrition to develop a meal that is balanced and create a menu that justifies the guidelines</li> </ul>	R11-12.1	CRP 6 CRP 8	FSDN9.4 NW14.2
<b>Performance Indicator 2.6 Explain the difference between a narrative and a standard recipe</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
2.6.1 Analyze the differences between a narrative and standard recipe	<ul style="list-style-type: none"> <li>Locate examples of narrative and standard recipes using the internet</li> </ul>	R11-12.7	HTRFB 7	NW14.3
<b>Performance Indicator 2.7 Identify reasons for modifying recipes</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
2.7.1 Formulate techniques used to modify recipes	<ul style="list-style-type: none"> <li>Create modifications for recipes based on nutritional needs</li> </ul>	R11-12.9	CRP 6 CRP 8	FSDN9.3

<b>Standard 3.0 Concepts in culinary math</b>				
<b>Performance Indicator 3.1</b> <b>Explain basic addition, subtraction, multiplication, and division as applied to fractions</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
3.1.1 Apply basic addition, subtraction, multiplication, and division as applied to fractions	<ul style="list-style-type: none"> <li>Revise recipes using basic math skills to show scaling up and down to change the <b>yield</b> of a recipe</li> </ul>	R11-12.3	HTRFB 5	
<b>Performance Indicator 3.2</b> <b>Identify equivalent measurements</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
3.2.1 Demonstrate <b>conversion factor</b> of food measurements	<ul style="list-style-type: none"> <li>Practice increasing and decreasing the yield of various recipes</li> </ul>	R11-12.3	HTRFB 5	
<b>Performance Indicator 3.3</b> <b>Describe reasons to change the yield of a recipe</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
3.3.1 Draw conclusions for reasons to change yield in recipes	<ul style="list-style-type: none"> <li>Prove yield changes for recipes by using conversion factor up or down</li> </ul>	R11-12.9	CRP 2	

<b>Performance Indicator 3.4</b> <b>Discuss correct techniques for measuring and weighing food items</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>ational FACS Standards</b>
3.4.1 Differentiate between the <b>balance scale</b> and the <b>portion scale</b>	<ul style="list-style-type: none"> <li>• Use the balance scale to weigh product</li> <li>• Use the portion scale to weigh product</li> </ul>	R11-12.3	CRP 2	NW14.3

<b>Standard 4.0 Culinary laboratory experience</b>				
<b>Performance Indicator 4.1</b> <b>Categorize the different types and characteristics of grains</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
4.1.1 Analyze parts of grain structure including <b>endosperm</b> and <b>bran</b> ; and types like <b>whole grains, enriched, and fortified</b>	<ul style="list-style-type: none"> <li>Make observations of different flour types and textures and assessing when proper use of various types of flours should occur</li> </ul>	R11-12.1 L11-12.4	CRP 8	NW14.5
<b>Performance Indicator 4.2</b> <b>Research purposes of common baking ingredients</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
4.2.1 Investigate common reactions such as <b>proofing</b> during the cooking process	<ul style="list-style-type: none"> <li>Develop a logical argument by using different leaveners used in baking to determine proper usage</li> </ul>	SL11-12.4 L11-12.6		NW14.5
<b>Performance Indicator 4.3</b> <b>Identify supplies and equipment used in baking, including mixing equipment, pans, and large equipment items</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
4.3.1 Compare supplies used in baking and the corresponding equipment	<ul style="list-style-type: none"> <li>Distinguish between types of foodstuffs used in baking such as flours, sugars, <b>leaveners</b> and the equipment used to bake proper product</li> </ul>	L11-12.4	CRP 2	

<b>Performance Indicator 4.4 Determine guidelines for buying and storing grain products</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
4.4. Formulate guidelines for proper buying and storage of grain product	<ul style="list-style-type: none"> <li>Create a procedure for storing and buying grains using storage and FIFO concepts</li> </ul>	SL11-12.1	HTRFB 8	
<b>Performance Indicator 4.5 Describe techniques used in baking</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
4.5.1 Demonstrate baking skills in laboratory setting	<ul style="list-style-type: none"> <li>Demonstrate practical baking skills by doing the following: <b>cut in, flute, fold, cream, knead, sift, beat, blend, dot, dissolve, and whip</b></li> </ul>	L11-12.4	CRP 2	
<b>Performance Indicator 4.6 Describe origins of common fruits and vegetables</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
4.6.1 Classify a list of a variety of fruits and vegetables	<ul style="list-style-type: none"> <li>Analyze a list including names and pictures of a variety of fruits and vegetables</li> </ul>	R11-12.3	CRP 4	NW14.3
<b>Performance Indicator 4.7 Determine ways to test for ripeness of fruits and vegetables</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
4.7.1 Organize a list of fruits and vegetables according to season harvested and available markets	<ul style="list-style-type: none"> <li>Create a graphic list of fruits and vegetables according to season availability</li> </ul>	R11-12.8		NW14.3

<b>Performance Indicator 4.8 Explain proper buying and storage of fruits and vegetables</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
4.8.1 Analyze proper techniques in buying and storing of produce	<ul style="list-style-type: none"> <li>Compare and contrast fresh and old produce and fruit noting desirable qualities</li> </ul>	R11-12.7		NW14.3
<b>Performance Indicator 4.9 Discuss enzymatic browning in fruits and vegetables</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
4.9.1 Prove <b>enzymatic browning</b> of fruits and vegetables and its prevention	<ul style="list-style-type: none"> <li>Experiment in laboratory ways to prevent enzymatic browning in fruits and vegetables</li> <li>Cite evidence of different solutions' ability to prevent enzymatic browning</li> </ul>	R11-12.1 R11-12.3		NW14.3
<b>Performance Indicator 4.10 Compare methods of cooking fruits and vegetables</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
4.10.1 Develop knife skills on various fruits and vegetables	<ul style="list-style-type: none"> <li>Develop standard knife skill use on proper vegetables and fruits such as <b>chop, cube, dice, pare, core, and shred</b></li> </ul>	SL11-12.1	CRP 2	NW14.3
4.10.2 Draw conclusions on various cooking methods of fruits and vegetables	<ul style="list-style-type: none"> <li>Analyze in lab setting a variety of cooking methods for fruits and vegetables</li> </ul>	R11-12.3	CRP 2	NW14.3
<b>Performance Indicator 4.11 Describe the types of dairy foods available</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
4.11.1 Investigate different sources for dairy products	<ul style="list-style-type: none"> <li>Working in groups, determine the common sources of dairy products</li> </ul>	SL11-12.1	HTRFB 4	NW14.3



<b>Performance Indicator 4.12</b> <b>Interpret the steps involved in processing dairy products</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
4.12.1 Explain the importance of modern dairy products	<ul style="list-style-type: none"> <li>Research various 'modern' processing techniques such as <b>homogenization</b> and <b>pasteurization</b></li> </ul>	L11-12.4	CRP 7	FSDN9.2 FPS8.2 NW14.4
<b>Performance Indicator 4.13</b> <b>Discuss guidelines for buying, storing, and cooking with dairy products</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
4.13.1 Draw conclusions on the proper buying, storing, and cooking of dairy	<ul style="list-style-type: none"> <li>Prepare and judge a variety of food products prepared with dairy products</li> </ul>	R11-12.3	CRP 2	FSDN9.3
4.13.2 Recommend ways to prevent problems when cooking with milk	<ul style="list-style-type: none"> <li>Compare different methods that cause milk to <b>curdle</b> and <b>scald</b></li> </ul>	L11-12.4		FSDN9.3
<b>Performance Indicator 4.14</b> <b>Identify varieties of protein foods</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
4.14.1 Recognize the different types of food that provide protein	<ul style="list-style-type: none"> <li>Investigate protein options found in various meats and other food sources</li> </ul>	SL11-12.1	CRP 7	FSDN9.3
<b>Performance Indicator 4.15</b> <b>Describe guidelines for purchasing and storing protein foods</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
4.15.1 Compare proper purchasing and storage methods for protein	<ul style="list-style-type: none"> <li>Create a chart for purchasing and storing proteins using <b>aging, elastin, marbling</b> criteria, <b>use by dates</b>, and <b>freshness dates</b></li> </ul>	SL11-12.4 L11-12.4	CRP 4	FSDN9.3

<b>Performance Indicator 4.16</b> <b>Determine techniques used in cooking protein</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
4.16.1 Demonstrate moist-heat and dry-heat methods of cooking protein foods	<ul style="list-style-type: none"> <li>Investigate using the following methods: (Moist) <b>boil, broil, steam, blanch, poach, simmer, baste, par-boil, stew, steep, and braise</b></li> <li>Investigate using the following methods: (Dry) <b>bake, broil, barbeque, pan fry, deep fry, sauté, grill, pan broil, sear, brown, roast, and stir-fry</b></li> </ul>	R11-12.3	CRP 2	FSDN9.3
4.16.2 Utilize enhancement technique for proteins	<ul style="list-style-type: none"> <li>Assess various methods that can improve cooking of proteins like <b>barding, larding, breading, dredging, marinating, rehydrating, and scoring</b></li> </ul>	R11-12.3		FSDN9.3
<b>Performance Indicator 4.17</b> <b>Research the process from farm to kitchen of a variety of protein foods</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
4.17.1 Explore the Farm to Table phenomenon	<ul style="list-style-type: none"> <li>Create a poster depicting the process of protein foods from farm to kitchen</li> </ul>	R11-12.2	CRP 4	FSDN9.5 NW14.4 NW14.5
<b>Performance Indicator 4.18</b> <b>List the variety of fats and oils used in cooking</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
4.18.1 Compare qualities of different oils and fats used cooking	<ul style="list-style-type: none"> <li>Assess different tastes and cooking abilities of various fats used in different cooking methods</li> </ul>	R11-12.1		FSDN9.2

<b>Performance Indicator 4.19</b> <b>Describe the purposes and effects fats and oils have in the cooking process</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
4.19.1 Determine the temperature at which fats and oils reach the <b>smoking point</b>	<ul style="list-style-type: none"> <li>Prove different smoke points of various oils by applying heat to different oils and checking temperatures at which they begin to smoke</li> </ul>	R11-12.3		FSDN9.2
<b>Standard 5.0 Culinary technology and career awareness in the professional kitchen</b>				
<b>Performance Indicator 5.1</b> <b>Identify terms related to culinary professions, employability skills and customer relations</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
5.1.1 Explore the various possibilities for employment in the foodservice industry	<ul style="list-style-type: none"> <li>Create a list of professions in the foodservice industry</li> <li>Invite guest speaker in industry to present to students</li> </ul>		HTRFB 9	FPS8.1 FSDN9.1
<b>5.2 Discuss the development of the modern food service industry</b>	<b>Recommended Application/Activity</b>	<b>CCSS Standards</b>	<b>CCTC Standards</b>	<b>National FACS Standards</b>
5.2.1 Discuss modern concepts developed by foodservice	<ul style="list-style-type: none"> <li>Assess various modern plating techniques employed by professionals</li> </ul>	R11-12.9	HTRFB 7	FSDN9.5

5.3 List the characteristic of a professional chef	Recommended Application/Activity	CCSS Standards	CCTC Standards	National FACS Standards
5.3.1 Analyze the purpose of the <b>kitchen brigade</b> from the executive chef to the Patissier to the Sous chef	<ul style="list-style-type: none"> <li>Create a chart of the formal kitchen brigade</li> </ul>	L11-12.6	HTRFB 9	FPS8.1
5.4 Identify employability skills	Recommended Application/Activity	CCSS Standards	CCTC Standards	National FACS Standards
5.4.1 Identify parts of a <b>résumé</b> including <b>references</b>	<ul style="list-style-type: none"> <li>Produce a personal résumé</li> </ul>	SL11-12.4	CRP 10	FPS8.1
5.4.2 List applicable culinary jobs	<ul style="list-style-type: none"> <li>Research culinary jobs in area</li> </ul>	SL11-12.5	CRP 10	FPS8.1
5.4.3 Critique an appropriate and inappropriate <b>job applications</b>	<ul style="list-style-type: none"> <li>Fill out job application forms</li> </ul>	R11-12.3	CRP 10	FPS8.1
5.4.4 Assess <b>job interview</b> skills	<ul style="list-style-type: none"> <li>Participate in mock job interview with classmates</li> </ul>	R11-12.7	CRP 10	FPS8.1

## **Glossary**

### ***Standard 1.0 Developing the skills for the Professional Kitchen***

1. Area Chef—usually in larger operations, the chef responsible for specific facilities or functions such as banquets; part of the modern kitchen brigade
2. Baker's scale—used to measure most baking ingredients; also called a baker's balance
3. Bench mixer—used to mix or whip dough and batters and slice, chop, shred, and grate foods with different attachments
4. Boning knife—used to filet fish, cut apart poultry, and remove raw meat from the bone
5. Botulism—a foodborne illness caused by eating food containing the spore-forming bacteria *Clostridium botulinum*, which paralyzes the muscles and can easily cause death; a form of food poisoning often caused by improper home canning
6. Boucher—the chef responsible for butchering meats and poultry; part of the classic kitchen brigade
7. Butcher knife—used to divide raw meat, poultry, or fish into sections
8. Chef de cuisine — the top chef of the kitchen, responsible for all kitchen operations, ensures quality, menu and recipe development and purchasing; part of the classic kitchen brigade.
9. Chef de partie—produces the menu items under the direct supervision of the chef or sous chef; also called a station chef; part of the classic kitchen brigade
10. Chef's knife—used to chop, dice, or mince food and to slice warm meat; has a long, triangular blade with a concave or hollow grind; also called a French knife
11. China cap—used for straining sauce and gravy and for making puree
12. Citrus knife—used to section citrus fruit; a two-sided blade with a round tip
13. Cleaver—used to chop through bones
14. Colander—used to rinse and drain salad greens, vegetables, and fruit

15. Compartment steamer—a cabinet that cooks food quickly through the use of circulating steam
16. Convection oven—an oven that uses a fan to circulate hot air over food
17. Cross contamination—the transfer of harmful bacteria from one food to another food
18. Direct contamination—contamination that occurs when raw foods, or the plants or animals from which they come, are exposed to toxins or harmful organisms or substances.
19. Double boiler—used when temperatures must be kept below boiling or for keeping food warm without overcooking
20. Dry measuring cups—used to measure dry ingredients
21. Executive chef—the top chef of the kitchen, who is responsible for all kitchen operations, quality, menu and recipe development and purchasing; part of the modern kitchen brigade
22. FIFO (First in, first out)—stock rotation and storage principle of using older items before new ones
23. Flat-top range—a cooking appliance that has burners under a solid top
24. Food mill—used for mashing, straining, and pureeing
25. French whip—used for general mixing, stirring, and beating of heavy liquids; also called a wire whip
26. Friturier—the chef responsible for all fried items; part of the classic kitchen brigade
27. Fruit and salad knife—used to prepare salad greens, vegetables, and fruits; has a hollow-ground blade
28. Heimlich Maneuver—procedure that removes food or other obstacles from a choking person's airway
28. Fungi—microorganisms found in soil, plants, animals, water, and in the air
29. Funnel—used to fill jars with liquid
30. Garde manger—the chef in charge of cold food production, including salads and salad dressings, cold appetizers, and buffet

items; also called a pantry chef; part of the classic kitchen brigade

31. Grater—a device used to shred food, such as cheese, potatoes, and carrots, into coarse pieces and to grate citrus peel and nutmeg
32. Griddle-top range—a cooking appliance with a smooth top
33. Grillardin—the chef responsible for all grilled items; part of the classic kitchen brigade
34. Hazard—any risk or danger; biological, chemical, or physical properties that might make food unsafe
35. Kitchen brigade—a system of staffing a kitchen so that each worker is assigned a set of specific tasks often related by cooking method, equipment, or food being prepared; there are classic brigade terms and modern brigade terms, each reflecting the changes in kitchen organization based on the times
36. Institutional cook- a chef who generally works with large quantities of prepackaged or prepared foods for a captive market such as a school, hospital, or prison; part of the modern kitchen brigade
37. Inventory—an itemized list of stock on hand and in storage areas
38. Ladle—a long-handled spoon used to portion out liquids
39. Line Cook—the chef responsible for preparing menu items according to recipe specifications; part of the modern kitchen brigade
40. Liquid measuring cups—used to measure liquids; measurements marked on the side of the cup
41. Measuring spoons—used to measure very small amounts of ingredients
42. Mise en place—literally in French, "to put in place"; the preparation and assembly of ingredients, pans, utensils, and equipment or serving pieces needed for a particular dish or service
43. OSHA (Occupational Safety and Health Administration)—an organization created within the Department of Labor that sets standards and inspects workplaces to ensure that employers provide safe and healthful environments
44. Pastry chef—the chef responsible for developing recipes for and preparing desserts, pastries, frozen desserts, and breads; part of the modern kitchen brigade

- 45. Paring knife—used to core, peel, pare, and section fruits and vegetables; blade is short with concave or hollow grind
- 46. Pâtissier—the chef responsible for all baked items, including breads, pastries and desserts; not necessarily under the sous chef's direct supervision; part of the classic kitchen brigade
- 47. Peeler—used to scrape vegetables, such as carrots and potatoes, and to peel fruit, such as apples
- 48. Pesticides—chemicals used to kill pests during plant growth; can cause food contamination
- 49. Poissonier—the chef responsible for fish and shellfish items; part of the classic kitchen brigade
- 50. Portion scale—used to weigh food to maintain an equal serving size
- 51. Potager—the chef responsible for soups and stocks; part of the classic kitchen brigade
- 52. Proofing oven—an enclosed, air-tight metal container with wheels that holds sheet pans of food and in which the temperature and humidity are controlled; also called a proofer
- 53. Roasting pan—used for roasting meat and poultry; made of heavy gauge stainless steel or aluminum
- 54. Rotisseur—the chef responsible for all roasted items and jus or other related sauces; part of the classic kitchen brigade
- 55. Salmonella—bacteria found in raw and undercooked eggs, poultry, meat, fish, and unpasteurized milk
- 56. Sanitation—maintaining a clean condition to promote hygiene and prevent disease
- 57. Saucier—the chef responsible for all sautéed items and most sauces; one of the most demanding jobs in the kitchen; part of the classic kitchen brigade
- 58. Serrated knife—a knife with a long, thin, blade with saw-like notches on the edge; usually used to slice breads and cakes
- 59. Sharpening steel—used constantly to keep knives sharp
- 60. Sharpening stone—used to sharpen short knives such as paring knives
- 61. Sheet pan—used for cookies, rolls, biscuits, sheet cakes, and some quick breads; also called a bun pan



- 62. Shigellosis—can be found in protein salads, lettuce, raw vegetables, poultry, shrimp, milk and milk products and may cause abdominal pain, diarrhea, vomiting, fever, or dehydration
- 63. Short order cook—a chef who is responsible for quickly preparing foods to order in smaller operations and who will work across many stations; part of the modern kitchen brigade
- 64. Skimmer—a tool used to remove a substance from the surface of a liquid
- 65. Sous chef—a cook who supervises food production and reports to the executive chef; second in command in the kitchen; part of both the classic and modern kitchen brigades
- 66. Spatula—used for scraping jobs
- 67. Springform pan—a pan with a clamp that's used to release the pan's bottom from its circular wall; commonly used to bake cheesecakes
- 68. Stack oven—a freestanding rectangular oven that has a series of well insulated shelves stacked on top of one another; also known as a deck oven
- 69. Standardized recipe—a recipe giving exact directions about ingredient amounts and preparation methods
- 70. Staphylococcus—a pathogenic bacterium that resembles tiny circles in the shape of grapes; can be found in the mouth, eyes, ears, and sinuses
- 71. Stockpot—used for soups, stews, chili, spaghetti, and corn on the cob; has deep, straight sides, two handles, and a lid
- 72. Strainer—used to separate solid particles from liquids
- 73. Temperature danger zone—a zone from 41° F to 135° F in which food should not be stored or kept for long periods of time due to risk of spoilage and bacteria growth
- 74. Thermometer—used to check the temperature of ovens, refrigerators, or freezers; the internal temperature of roasting meat; or the temperature of hot fat
- 75. Trichinosis—a foodborne illness caused by a food parasite, Trichinella, that can be found in pork, nonpork sausages and wild \

game; may cause abdominal pain, nausea, diarrhea, fever, swelling around eyes, thirst, sweating, chills, fatigue, and hemorrhaging

- 76. Tourant—the cook who works where needed; also call the roundsman or swing cook; part of the classic kitchen brigade
- 77. Whisk— a hand held mixer incorporating a coil of wires; used for whipping eggs or cream
- 78. Workflow—the movement of work in an orderly manner so it can be done most efficiently
- 79. Zester—used to remove tiny strips from the outer surface of citrus peels, which add visual interest and flavor to food

***Standard 2.0 Basic menus and recipes used in the professional kitchen***

1. A la carte—food offered with a separate price for each food item on the menu
2. Cuisine—a particular style of cooking, often related to a country or region
3. Dietary Guidelines for Americans—a set of guidelines about food choices developed by the U.S. government
4. Entrée—the main course of a meal
5. Heart healthy—foods that are low in calories, fat, salt, or cholesterol
6. Low fat diet—a diet that allows you to eat only foods that are low in fat
7. Low sodium diet—a diet that allows you to eat only foods that are low in sodium
8. Narrative Recipe—a recipe written in a paragraph form; all the ingredients, their amounts and the how to prepare the food all are written within the paragraph
9. Prix fixe—a complete meal of several courses, sometimes with choices permitted, offered by a restaurant at a fixed price
10. RDA (Recommended Dietary Allowances)—suggested levels of nutrient intake to meet the needs of most healthy people

***Standard 3.0 Concepts in culinary math***

1. Balance Scale—A device for weighing. It has a balanced beam and two pans. To measure weight, place an object in one pan and standard weights in the other to find what the object weighs. When the pans contain exactly the same mass the beam will be in balance
2. Conversion factor—number used to increase or decrease a recipe
3. Portion scale—scale that use a spring mechanism, round dial and single flat tray to measure weight
4. Yield—the number of servings, or portions, that a recipe produces

***Standard 4.0 Culinary laboratory experiences***

1. Aging—in cooking, the period during which food is allowed to rest after a stage of processing; for example, rigor mortis dissipates in freshly killed meat, and freshly milled flour whitens and will produce a less sticky dough
2. Bake—cook in the oven in dry heat without a cover
3. Barbecue—to cook by broiling, grilling, roasting, or baking; traditionally, to cook meat on a rack or spit over hot coals
4. Barding—tying thin slices of fat, such as bacon or pork fatback, over meats or poultry that have little or no natural fat to protect and moisten during roasting
5. Baste—to spoon pan liquids over the surface of food during cooking to keep the food moist and add flavor
6. Beat—mix or stir quickly, bringing the contents of bowl to the top and down again
7. Blanch—to briefly immerse food in boiling water or steam; inactivates the enzymes in foods
8. Blend—to mix ingredients until thoroughly combined
9. Boil—to heat a liquid until bubbles rise to the surface; a method of cooking food in a boiling liquid
10. Braise—a long, slow combination cooking technique in which food is seared and then simmered in enough liquid to cover no more than 2/3 of the food
11. Bran—the tough outer layer of a cereal grain and the part highest in fiber
12. Bread—to coat a food item with crumbs and egg
13. Broil—a dry cooking method in which food is cooked directly under a primary heat source
14. Brown—to turn the surface of a food brown by quickly cooking it in hot fat or placing it under a broiler
15. Chop—to cut into small pieces
16. Core—to remove the center part or stem of a fruit or vegetable, leaving a hole

17. Cream—to blend until smooth and fluffy
18. Cube—to cut into small squares of equal size
19. Curdling—formation of curds that happen when milk is overheated or an acid food is added to milk products
20. Cut in—to combine solid fat with dry ingredients until lumps of the desired size remain; may be done using a pastry blender, two knives, or a fork
21. Deep fry—to cook in a large amount of hot fat
22. Dice—to cut into very small cubes of even size
23. Dissolve—to cause a solid to turn into or become part of a liquid
24. Dot—to place small pieces of something, usually a fat, over the surface of a food
25. Dredge—to coat a food by sprinkling it with or dipping it in a dry ingredient, such as flour or bread crumbs
26. Elastin—a protein found in connective tissues, particularly ligaments and tendons, that does not dissolve when cooked; often appears as the white or silver covering on meats known as "silver skin"
27. Endosperm—the largest part of a cereal grain and a source of protein and carbohydrates (starch); used primarily in milled products
28. Enriched—processed foods, especially grain products, in which nutrients lost in processing have been replaced; using additives to increase the nutritive value of processed foods beyond the level contained in the food before processing
29. Enzymatic browning—the discoloration of fruits and vegetables when peeled, caused by enzymes
30. Flute—a manner of decorating crust by making uniform folds, grooves, or twists in the crust, such as around the edge of a pie
31. Fold—to add ingredients carefully so as not to lose air bubbles; utensil is passed down through the mixture, across the bottom, and up the opposite side of the bowl, gently turning the mixture over

- 32. Fortified—a term used for food products that have had vitamins and/or minerals added to them
- 33. Freshness date—the date stamped on a food product by which the food is guaranteed fresh
- 34. Grill—a method of short order cooking on a griddle
- 35. Homogenization—a process that reduces milk fat to a smaller and more uniform size and distributes it evenly throughout the milk
- 36. Knead—a mixing process in which dough is folded, pressed, and squeezed to strengthen the gluten strands and allow yeast dough to develop the proper texture
- 37. Larding—inserting thin slices of fat, such as pork fatback, into a low-fat meat in order to add moisture during cooking
- 38. Leavener—any ingredient or process that produces air bubbles and causes the rising of baked goods
- 39. Marbling—fat that builds up between muscle fibers
- 40. Marinate—to soak foods in a liquid to improve texture or flavor; the liquid generally contains herbs, spices, and other flavoring ingredients, as well as oil and an acid, such as wine, vinegar, or lemon juice, to break down the connective tissue of meat
- 41. Pan-broil—to cook without fat in an uncovered skillet and pour off excess fat as it accumulates
- 42. Pan-fry—a method of cooking in which a moderate amount of fat is heated in a pan before adding food
- 43. Parboil—to boil briefly as a preliminary or incomplete cooking procedure
- 44. Pare—to remove the stem and outer covering of a vegetable or fruit with a paring knife or peeler
- 45. Pasteurization—a heat treatment used to destroy bacteria and other microorganisms in foods, such as milk, eggs, wine, and juice
- 46. Poach—to cook in a small amount of simmering liquid
- 47. Proof—in yeast dough production, the final rising stage that occurs after the dough is shaped but before baking
- 48. Rehydration—the process of adding water back into a food

- 49. Roast—to cook uncovered in the oven with dry heat
- 50. Scald—to heat a liquid to just below the boiling point; to dip food into boiling water or pour boiling water over the food
- 51. Score—to make small, shallow cuts on the surface of a food
- 52. Sear—to brown food quickly over high heat; usually done as a first step for combination cooking methods
- 53. Shred—to cut or tear into thin pieces
- 54. Sift—to put a dry ingredient through a sieve or sifter to remove lumps
- 55. Simmer—a moist cooking technique in which food is cooked slowly and steadily in a liquid just below the boiling point (185° F degrees – 200 ° F)
- 56. Steam—to cook with vapor produced by a boiling liquid without allowing food to come in contact with the water
- 57. Steep—to cover with boiling water and let stand without additional heating until flavor and color is extracted as for tea
- 58. Stew—to cook one food or several foods together in a seasoned liquid for a long period of time
- 59. Stir-fry—a dry cooking technique; foods cook quickly in a small amount of fat over high heat while stirring constantly; generally uses a wok, a large pan with sloping sides
- 60. Use by date—the date by which food products should be used or discarded
- 61. Whip—to beat rapidly, usually with a whisk to increase volume and incorporate air



***Standard 5.0 Culinary technology and career awareness in the professional kitchen***

1. Job Application—a form in which you supply information about yourself that will help an employer make a hiring decision
2. Job Interview—a get-acquainted meeting between an employer and a job applicant; the method most widely used by employers to assess an applicant's qualifications
3. References—people who know an applicant well and can provide information about that person, his or her character, work ability, or academic standing; needed for job application forms
4. Résumé—a summary of your qualifications for a job

***Standard 6.0 Appendix A - Equivalent Measurements Chart***

1 Cup =  $\frac{1}{2}$  Pint

1 Cup = 8 Fluid Ounces

1 Tablespoon =  $\frac{1}{2}$  Fluid Ounce

10  $\frac{2}{3}$  Tablespoons =  $\frac{2}{3}$  Cup

12 Tablespoons =  $\frac{3}{4}$  Cup

16 Tablespoons = 1 Cup

2 Cups = 1 Pint

2 Pints = 1 Quart

3 Teaspoons = 1 Tablespoon

4 Cups = 1 Quart

4 Quarts = 1 Gallon

4 Tablespoons =  $\frac{1}{4}$  Cup

5  $\frac{1}{2}$  Tablespoons =  $\frac{1}{3}$  Cup

8 Tablespoons =  $\frac{1}{2}$  Cup

## **Common Core State Standards Grades 9-12**

### **ELA Speaking and Listening Standards Grades 9-10**

1. Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others’ ideas and expressing their own clearly and persuasively. **SL9-10.1**
  - a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. **SL9-10.1a**
  - b. Work with peers to set rules for collegial discussions and decision-making (e.g., informal consensus, taking votes on key issues, presentation of alternate views), clear goals and deadlines, and individual roles as needed. **SL9-10.1b**
  - c. Propel conversations by posing and responding to questions that relate the current discussion to broader themes or larger ideas; actively incorporate others into the discussion; and clarify, verify, or challenge ideas and conclusions. **SL9-10.1c**
  - d. Respond thoughtfully to diverse perspectives, summarize points of agreement and disagreement, and, when warranted, qualify or justify their own views and understanding and make new connections in light of the evidence and reasoning presented. **SL9-10.1d**
2. Integrate multiple sources of information presented in diverse media or format(e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source. **SL9-10.2**
3. Evaluate a speaker’s point of view, reasoning, and use of evidence and rhetoric, identifying any fallacious reasoning or exaggerated or distorted evidence. **SL9-10.3**
4. Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task. **SL9-10.4**
5. Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest. **SL9-10.5**

### **ELA Speaking and Listening Standards Grades 11-12**

1. Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11–12 topics, texts, and issues, building on others’ ideas and expressing their own clearly and persuasively. **SL11-12.1**
  - a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. **SL11-12.1a**
  - b. Work with peers to promote civil, democratic discussions and decision-making, set clear goals and deadlines, and establish individual roles as needed. **SL11-12.1b**

- c. Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives. **SL11-12.1c**
- d. Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task. **SL11-12.1d**
- 2. Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data. **SL11-12.2**
- 3. Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used. **SL11-12.3**
- 4. Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks. **SL11-12.4**
- 5. Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest. **SL11-12.5**

#### **ELA Language Grades 9-10**

- 4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 9–10 reading and content, choosing flexibly from a range of strategies. **L9-10.4**
  - a. Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. **L9-10.4a**
  - b. Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., analyze, analysis, analytical; advocate, advocacy). **L9-10.4b**
  - c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, or its etymology. **L9-10.4c**
  - d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary). **L9-10.4d**
- 6. Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression. **L9-10.6**

#### **ELA Language Grades 11-12**

- 4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 11–12 reading and content, choosing flexibly from a range of strategies. **L11-12.4**

- a. Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. **L11-12.4a**
  - b. Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., conceive, conception, conceivable). **L11-12.4b**
  - c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, its etymology, or its standard usage. **L11-12.4c**
  - d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary) **L11-12.4d**
6. Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression. **L11-12.6**

### **Reading Standards for Literacy in Science and Technical Subjects Grades 9-10**

- 1. Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions. **R9-10.1**
- 2. Determine the central ideas or conclusions of a text; trace the text's explanation or depiction of a complex process, phenomenon, or concept; provide an accurate summary of the text. **R9-10.2**
- 3. Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text. **R9-10.3**
- 4. Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 9–10 texts and topics. **R9-10.4**
- 5. Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., force, friction, reaction force, energy). **R9-10.5**
- 6. Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, defining the question the author seeks to address. **R9-10.6**
- 7. Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words. **R9-10.7**
- 8. Assess the extent to which the reasoning and evidence in a text support the author's claim or a recommendation for solving a scientific or technical problem. **R9-10.8**
- 9. Compare and contrast findings presented in a text to those from other sources (including their own experiments), noting when the findings support or contradict previous explanations or accounts. **R9-10.9**
- 10. By the end of grade 10, read and comprehend science/technical texts in the grades 9–10 text complexity band independently and proficiently. **R9-10.10**

### **Reading Standards for Literacy in Science and Technical Subjects Grades 11-12**

1. Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account. **R11-12.1**
2. Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms. **R11-12.2**
3. Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text. **R11-12.3**
4. Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11–12 texts and topics. **R11-12.4**
5. Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas. **R11-12.5**
6. Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved. **R11-12.6**
7. Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem. **R11-12.7**
8. Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information. **R11-12.8**
9. Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible. **R11-12.9**
10. By the end of grade 12, read and comprehend science/technical texts in the grades 11–CCR text complexity band independently and proficiently. **R11-12.10**

## Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects Grades 9-10

1. Write arguments focused on discipline-specific content. **W9-10.1**
  - a. Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence. **W9-10.1a**
  - b. Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form and in a manner that anticipates the audience's knowledge level and concerns. **W9-10.1b**
  - c. Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. **W9-10.1c**
  - d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. **W9-10.1d**
  - e. Provide a concluding statement or section that follows from or supports the argument presented. **W9-10.1e**
2. Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. **W9-10.2**
  - a. Introduce a topic and organize ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. **W9-10.2a**
  - b. Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. **W9-10.2b**
  - c. Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among ideas and concepts. **W9-10.2c**
  - d. Use precise language and domain-specific vocabulary to manage the complexity of the topic and convey a style appropriate to the discipline and context as well as to the expertise of likely readers. **W9-10.2d**
  - e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. **W9-10.2e**
  - f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic). **W9-10.2f**
3. Write precise enough descriptions of the step-by-step procedures they use in their investigations or technical work that others can replicate them and (possibly) reach the same results. **W9-10.3**
4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. **W9-10.4**
5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. **W9-10.5**
6. Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically. **W9-10.6**

7. Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. **W9-10.7**
8. Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation. **W9-10.8**
9. Draw evidence from informational texts to support analysis, reflection, and research. **W9-10.9**
10. Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. **W9-10.10**

### **Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects Grades 11-12**

1. Write arguments focused on discipline-specific content. **W11-12.1**
  - a. Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence. **W11-12.1a**
  - b. Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases. **W11-12.1b**
  - c. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. **W11-12.1c**
  - d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. **W11-12.1d**
  - e. Provide a concluding statement or section that follows from or supports the argument presented. **W11-12.1e**
2. Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. **W11-12.2**
  - a. Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. **W11-12.2a**
  - b. Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. **W11-12.2b**
  - c. Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts. **W11-12.2c**



- d. Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers. **W11-12.2d**
- e. Provide a concluding statement or section that follows from and supports the information or explanation provided (e.g., articulating implications or the significance of the topic). **W11-12.2e**
- 3. Write precise enough descriptions of the step-by-step procedures they use in their investigations or technical work that others can replicate them and (possibly) reach the same results. **W11-12.3**
- 4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. **W11-12.4**
- 5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. **W11-12.5**
- 6. Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information. **W11-12.6**
- 7. Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. **W11-12.7**
- 8. Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation. **W11-12.8**
- 9. Draw evidence from informational texts to support analysis, reflection, and research. **W11-12.9**
- 10. Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. **W11-12.10**

## **Common Career and Technical Core Standards**

### ***Human Services Career Cluster***

#### **Human Services Career Cluster Standards (HU)**

- 1. Evaluate principles of planning, development, implementation, and evaluation to accomplish long-range goals in human services. **HU1**
- 2. Evaluate the role of the family, community and human services in society and the economy. **HU2**
- 3. Use effective communication with human services clients and their families. **HU3**
- 4. Demonstrate ethical and legal conduct in human services settings. **HU4**
- 5. Evaluate career opportunities in each of the Human Services Career Pathways. **HU5**

6. Explain how human development principles enhance the well-being of individuals and families. **HU6**

#### **Consumer Services Career Pathway (HU-CSM)**

1. Summarize necessary credentials, licensures, or state specific requirements to prepare for a career in consumer services. **HU-CSM1**
2. Communicate product or equipment features that meet the needs of clients and consumer. **HU-CSM2**
3. Make consumer services recommendations meeting the needs of clients or customers. **HU-CSM3**
4. Analyze financial/economic situations when making recommendations about consumer services. **HU-CSM4**
5. Use standard business processes or procedures to create consumer service information and facilitate client interactions. **HU-CSM5**
6. Use a variety of methods to educate audiences about consumer services. **HU-CSM6**
7. Demonstrate knowledge of ethical and legal responsibilities associated with providing consumer services. **HU-CSM7**
8. Apply business procedures and utilize equipment and facilities to produce satisfying client outcomes. **HU-CSM8**

#### **Early Childhood Development and Services Career Pathway (HU-EC)**

1. Demonstrate communication techniques with children to facilitate ongoing development and enhance learning. **HU-EC1**
2. Communicate effectively with fellow staff members to facilitate child development activities. **HU-EC2**
3. Maintain working knowledge of child development licensing and certification organizations to keep abreast of current procedures and changes. **HU-EC3**
4. Create and maintain relationships between staff and parents/family members to encourage involvement and facilitate child development and learning. **HU-EC4**
5. Evaluate safety and sanitation procedures associated with the early childhood education environment to assure compliance and prevent potential hazards. **HU-EC5**
6. Adhere to ethical and legal responsibilities, laws, and regulations to protect children and families. **HU-EC6**
7. Apply principles of child growth and development, including social, emotional, physical, and cognitive milestones, to provide comprehensive program offerings. **HU-EC7**
8. Evaluate curriculum for inclusiveness of children with special needs. **HU-EC8**

#### **Family and Community Services Career Pathway (HU-FAM)**

1. Use formal and informal assessment practices to create and evaluate a prevention and/or treatment plan. **HU-FAM1**
2. Identify community resources to provide family and community services. **HU-FAM2**
3. Communicate effectively to gain support from the client's family and other support groups. **HU-FAM3**
4. Comply with laws and procedures that govern abuse, neglect, confidentiality, and other health and safety situations. **HU-FAM4**
5. Evaluate crisis prevention, intervention, and resolution techniques to formulate emergency plans. **HU-FAM5**

### **Personal Care Services Career Pathway (HU-PC)**

1. Analyze basic principles of biology, chemistry, and human anatomy for safe and effective utilization and selection of personal care products and services. **HU-PC1**
2. Evaluate an individualized personal care plan that reflects client preferences, needs, and interests for a course of treatment/action. **HU-PC2**
3. Utilize data and information to maintain electronic records of client services and make recommendations for personal care services. **HU-PC3**
4. Demonstrate policies and procedures to achieve a safe and healthy environment for personal care services. **HU-PC4**
5. Develop organizational policies, procedures, and regulations to establish personal care organization priorities, to accomplish the mission, and to provide high quality service to a diverse set of clients and families. **HU-PC5**
6. Identify personal care business opportunities enhanced by community involvement, self-improvement, and current trends. **HU-PC6**
7. Apply various methods of obtaining feedback to understand expectations and promote high quality standards. **HU-PC7**

### ***Hospitality & Tourism Career Cluster***

#### **Hospitality & Tourism Career Cluster Standards**

1. Describe the key components of marketing and promoting hospitality and tourism products and services. **HT1**
2. Evaluate the nature and scope of the Hospitality and Tourism Career Cluster and the role of hospitality and tourism in society and the economy. **HT2**
3. Demonstrate hospitality and tourism customer service skills that meet customers' needs. **HT3**
4. Describe employee rights and responsibilities and employers' obligations concerning occupational health and safety in the hospitality and tourism workplace. **HT4**
5. Identify potential (real and perceived) hazards and emergency situations and determine the appropriate safety and security measures in the hospitality and tourism workplace. **HT5**
6. Describe career opportunities and means to attain those opportunities in each of the Hospitality and Tourism Career Pathways. **HT6**

#### **Lodging Career Pathway (HT-LOD)**

1. Use various communication technologies are used to accomplish work tasks in lodging facilities. **HT-LOD1**
2. Explain the role and importance of housekeeping operations to the lodging facilities. **HT-LOD2**
3. Allocate staff positions to meet the needs of various lodging departments. **HT-LOD3**
4. Describe the role and responsibilities of lodging managers. **HT-LOD4**
5. Compare the advantages and disadvantages of independently owned and chain-affiliated lodging facilities. **HT-LOD5**
6. Analyze the departmental interrelationships of a lodging facility. **HT-LOD6**
7. Explain various check-in and check-out procedures used in the lodging industry. **HT-LOD7**

8. Understand reservation procedures used in the lodging industry. **HT-LOD8**
9. Explain how room access policies and procedures ensure guest safety and minimize risks to the lodging facility. **HT-LOD9**
10. Explain how cash control procedures are used in the lodging industry. **HT-LOD10**
11. Explain how guests and property are protected to minimize losses or liabilities in the lodging facility. **HT-LOD11**
12. Explain the basic legal issues in lodging management. **HT-LOD12**

#### **Restaurants and Food and Beverage Services Career Pathway (HT-RFB)**

1. Describe ethical and legal responsibilities in food and beverage service facilities. **HT-RFB1**
2. Demonstrate safety and sanitation procedures in food and beverage facilities. **HT-RFB2**
3. Use information from cultural and geographical studies to guide customer service decisions in food and beverage service facilities. **HT-RFB3**
4. Demonstrate leadership qualities and collaboration with others. **HT-RFB4**
5. Research costs, pricing, market demands and marketing strategies to manage profitability in food and beverage service facilities. **HT-RFB5**
6. Explain the benefits of the use of computerized systems to manage food service operations and guest service. **HT-RFB6**
7. Utilize technical resources for food services and beverage operations to update or enhance present practice. **HT-RFB7**
8. Implement standard operating procedures related to food and beverage production and guest service. **HT-RFB8**
9. Describe career opportunities and qualifications in the restaurant and food service industry. **HT-RFB9**
10. Apply listening, reading and writing, and speaking skills to enhance operations and customer service in food and beverage service facilities. **HT-RFB10**

#### ***Education and Training Career Cluster***

##### **Education and Training Career Cluster Standards (ED)**

1. Apply communication skills with students, parents, and other groups to enhance learning and a commitment to learning. **ED1**
2. Demonstrate effective oral, written, and multimedia communication in multiple formats and contexts. **ED2**
3. Use critical thinking to process educational communications, perspectives, policies, and/or procedures. **ED3**
4. Evaluate and manage risks to safety, health, and the environment in education and training settings. **ED4**
5. Demonstrate group collaboration skills to enhance professional education and training practice. **ED5**
6. Analyze ethical and legal policies of professional education and training settings. **ED6**
7. Explain legal rights that apply to individuals and practitioners within education and training settings. **ED7**
8. Demonstrate ethical and legal behavior within and outside education and training settings. **ED8**
9. Describe state-specific professional development requirements to maintain employment and to advance in an education and training career. **ED9**
10. Apply organizational skills and logic to enhance professional education and training practice. **ED10**
11. Demonstrate group management skills that enhance professional education and training practice. **ED11**

### **Teaching and Training Career Pathway (ED-TT)**

1. Use foundational knowledge of subject matter to plan and prepare effective instruction and design courses or programs. **ED-TT1**
2. Employ knowledge of learning and developmental theory to describe individual learners. **ED-TT2**
3. Use content knowledge and skills of instruction to develop standards-based goals and assessments. **ED-TT3**
4. Identify materials and resources needed to support instructional plans. **ED-TT4**
5. Establish a positive climate to promote learning. **TT5**
6. Identify motivational, social, and psychological effective practices that guide personal conduct. **ED-TT6**
7. Demonstrate organizational and relationship building skills used to manage instructional activities and related procedures. **ED-TT7**
8. Demonstrate flexibility and adaptability in instructional planning. **ED-TT8**
9. Utilize assessment and evaluation tools and data to advance learner achievement and adjust learning plans. **ED-TT9**
10. Evaluate teaching and training performance indicators to determine and improve effectiveness of instructional practices and needed professional development. **ED-TT10**
11. Implement strategies to maintain relationships with others to increase support for the organization. **ED-TT11**

### **Common Career and Technical Core Career Ready Practices (CCTC CRP)**

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. Act as a responsible and contributing citizen and employee. <b>CRP1</b></li> <li>2. Apply appropriate academic and technical skills. <b>CRP2</b></li> <li>3. Attend to personal health and financial well-being. <b>CRP3</b></li> <li>4. Communicate clearly, effectively, and with reason. <b>CRP4</b></li> <li>5. Consider the environmental, social and economic impacts of decisions. <b>CRP5</b></li> <li>6. Demonstrate creativity and innovation. <b>CRP6</b></li> <li>7. Employ valid and reliable research strategies. <b>CRP7</b></li> </ol> | <ol style="list-style-type: none"> <li>8. Utilize critical thinking to make sense of problems and persevere in solving them. <b>CRP8</b></li> <li>9. Model integrity, ethical leadership, and effective management. <b>CRP9</b></li> <li>10. Plan education and career path aligned to personal goals. <b>CRP10</b></li> <li>11. Use technology to enhance productivity. <b>CRP11</b></li> <li>12. Work productively in teams while using cultural/global competence. <b>CRP12</b></li> </ol> |
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## **National Standards for Family and Consumer Sciences**

### **Career, Community and Family Connections**

1. Integrate multiple life roles and responsibilities in family, work, and community settings. **CCFC1**
  - 1.1 Analyze strategies to manage multiple roles and responsibilities (individual, family, career, community, and global). **CCFC1.1**
  - 1.2 Demonstrate transferable and employability skills in school, community and workplace settings. **CCFC1.2**
  - 1.3 Evaluate the reciprocal effects of individual and family participation in community activities. **CCFC1.3**

### **Consumer and Family Resources**

2. Evaluate management practices related to the human, economic, and environmental resources. **CFR2**
  - 2.1 Demonstrate management of individual and family resources such as food, clothing, shelter, health care, recreation, transportation, time, and human capital. **CFR2.1**
  - 2.2 Analyze the relationship of the environment to family and consumer resources. **CFR2.2**
  - 2.3 Analyze policies that support consumer rights and responsibilities. **CFR2.3**
  - 2.4 Evaluate the effects of technology on individual and family resources. **CFR2.4**
  - 2.5 Analyze relationships between the economic system and consumer actions. **CFR2.5**
  - 2.6 Demonstrate management of financial resources to meet the goals of individuals and families across the life span. **CFR2.6**

### **Consumer Services**

3. Integrate knowledge, skills, and practices needed for a career in consumer services. **CS3**
  - 3.1 Analyze career paths within consumer service industries. **CS3.1**
  - 3.2 Analyze factors that affect consumer advocacy. **CS3.2**
  - 3.3 Analyze factors in developing a long-term financial management plan. **CS3.3**
  - 3.4 Analyze resource consumption for conservation and waste management practices. **CS3.4**
  - 3.5 Demonstrate skills needed for product development, testing, and presentation. **CS3.5**

### **Education and Early Childhood**

4. Integrate knowledge, skills, and practices required for careers in early childhood, education, and services. **EEC4**
  - 4.1 Analyze career paths within early childhood, education, and related services. **EEC4.1**
  - 4.2 Analyze developmentally appropriate practices to plan for early childhood, education, and services. **EEC4.2**
  - 4.3 Demonstrate integration of curriculum and instruction to meet children's developmental needs and interests. **EEC4.3**
  - 4.4 Demonstrate a safe and healthy learning environment for children. **EEC4.4**
  - 4.5 Demonstrate techniques for positive collaborative relationships with children. **EEC4.5**
  - 4.6 Demonstrate professional practices and standards related to working with children. **EEC4.6**

### **Facilities Management and Maintenance**

- 5. Integrate knowledge, skills, and practices required for careers in facilities management and maintenance. **FMM5**
  - 5.1 Analyze career paths within the facilities management and maintenance areas. **FMM5.1**
  - 5.2 Demonstrate planning, organizing, and maintaining an efficient housekeeping operation for residential or commercial facilities. **FMM5.2**
  - 5.3 Demonstrate sanitation procedures for a clean and safe environment. **FMM5.3**
  - 5.4 Apply hazardous materials and waste management procedures. **FMM5.4**
  - 5.5 Demonstrate a work environment that provides safety and security. **FMM5.5**
  - 5.6 Demonstrate laundering processes aligned with industry standards and regulations. **FMM5.6**
  - 5.7 Demonstrate facilities management functions. **FMM5.7**

### **Family**

- 6. Evaluate the significance of family and its effects on the well-being of individuals and society. **F6**
  - 6.1 Analyze the effects of family as a system on individuals and society. **F6.1**
  - 6.2 Evaluate the effects of diverse perspectives, needs, and characteristics of individual and families. **F6.2**

### **Family and Community Services**

- 7. Synthesize knowledge, skills, and practices required for careers in family & community services. **FCS7**
  - 7.1 Analyze career paths within family and community services. **FCS7.1**
  - 7.2 Analyze factors relating to providing family and community services. **FCS7.2**
  - 7.3 Demonstrate professional behaviors, skills, and knowledge in providing family and community services. **FCS7.3**
  - 7.4 Evaluate conditions affecting individuals and families with a variety of disadvantaging conditions. **FCS7.4**
  - 7.5 Evaluate services for individuals and families with a variety of disadvantaging conditions. **FCS7.5**

### **Food Production and Services**

- 8. Integrate knowledge, skills, and practices required for careers in food production and services. **FPS8**
  - 8.1 Analyze career paths within the food production and food services industries. **FPS8.1**
  - 8.2 Demonstrate food safety and sanitation procedures. **FPS8.2**

### **Food Science, Dietetics, and Nutrition**

- 9. Integrate knowledge, skills, practices required for careers in food science, food technology, dietetics, and nutrition. **FSDN9**
  - 9.1 Analyze career paths within food science, food technology, dietetics, and nutrition industries. **FSDN9.1**
  - 9.2 Apply risk management procedures to food safety, food testing, and sanitation. **FSDN9.2**
  - 9.3 Evaluate nutrition principles, food plans, preparation techniques and specialized dietary plans. **FSDN9.3**
  - 9.4 Apply basic concepts of nutrition and nutritional therapy in a variety of settings. **FSDN9.4**
  - 9.5 Demonstrate use of current technology in food product development and marketing. **FSDN9.5**

- 9.6 Demonstrate food science, dietetics, and nutrition management principles and practices. **FSDN9.6**

### **Hospitality, Tourism, and Recreation**

10. Synthesize knowledge, skills and practices required for careers in hospitality, tourism, and recreation. **HTR10**
- 10.1 Analyze career paths within the hospitality, tourism and recreation industries. **HTR10.1**
  - 10.2 Demonstrate procedures applied to safety, security, and environmental issues. **HTR10.2**
  - 10.3 Apply concepts of quality service to assure customer satisfaction. **HTR10.3**
  - 10.4 Demonstrate practices and skills involved in lodging occupations. **HTR10.4**
  - 10.5 Demonstrate practices and skills for travel related services. **HTR10.5**
  - 10.6 Demonstrate management of recreation, leisure, and other programs and events. **HTR10.6**

### **Housing and Interior Design**

11. Integrate knowledge, skills, and practices required for careers in housing and interior design. **HID11**
- 11.1 Analyze career paths within the housing, interior design, and furnishings industries. **HID11.1**
  - 11.2 Evaluate housing and design concepts and theories, including green design, in relation to available resources and options. **HID11.2**
  - 11.3 Apply housing and interior design knowledge, skills and processes to meet specific design needs. **HID11.3**
  - 11.4 Demonstrate design, construction document reading, and space planning skills required for the housing, interior design and furnishings industries. **HID11.4**
  - 11.5 Analyze design and development of architecture, interiors, and furnishings through the ages. **HID11.5**
  - 11.6 Evaluate client's needs, goals, and resources in creating design plans for housing and residential and commercial interiors. **HID11.6**
  - 11.7 Apply design knowledge, skills, processes, and theories and oral, written, and visual presentation skills to communicate design ideas. **HID11.7**
  - 11.8 Analyze professional practices, procedures for business profitability and career success, and the role of ethics in the housing, interiors and furnishings industries. **HID11.8**
  - 11.9 Develop a global view to weigh design decisions with the parameters of ecological, socioeconomic, and cultural contexts within the housing, interior design, and furnishings industries. **HID11.9**

### **Human Development**

12. Analyze factors that influence human growth and development. **HD12**
- 12.1 Analyze principles of human growth and development across the life span. **HD12.1**
  - 12.2 Analyze conditions that influence human growth and development. **HD12.2**
  - 12.3 Analyze strategies that promote growth and development across the life span. **HD12.3**

### **Interpersonal Relationships**



- 13. Demonstrate respectful and caring relationships in the family, workplace and community. **IR13**
  - 13.1 Analyze functions and expectations of various types of relationships. **IR13.1**
  - 13.2 Analyze personal needs and characteristics and their effects on interpersonal relationships. **IR13.2**
  - 13.3 Demonstrate communication skills that contribute to positive relationships. **IR13.3**
  - 13.4 Evaluate effective conflict prevention and management techniques. **IR13.4**
  - 13.5 Demonstrate teamwork and leadership skills in the family, workplace, and community. **IR13.5**
  - 13.6 Demonstrate standards that guide behavior in interpersonal relationships. **IR13.6**

#### **Nutrition and Wellness**

- 14. Demonstrate nutrition and wellness practices that enhance individual and family well-being. **NW14**
  - 14.1 Analyze factors that influence nutrition and wellness practices across the life span. **NW14.1**
  - 14.2 Evaluate the nutritional needs of individuals and families in relation to health and wellness across the life span. **NW14.2**
  - 14.3 Demonstrate ability to acquire, handle, and use foods to meet nutrition and wellness needs of individuals and families across the life span. **NW14.3**
  - 14.4 Evaluate factors that affect food safety from production through consumption. **NW14.4**
  - 14.5 Evaluate the influence of science and technology on food composition, safety, and other issues. **NW14.5**

#### **Parenting**

- 15. Evaluate the effects of parenting roles and responsibilities on strengthening the well-being of individuals and families. **P15**
  - 15.1 Analyze roles and responsibilities of parenting. **P15.1**
  - 15.2 Evaluate parenting practices that maximize human growth and development. **P15.2**
  - 15.3 Evaluate external support systems that provide services for parents. **P15.3**
  - 15.4 Analyze physical and emotional factors related to beginning the parenting process. **P15.4**

#### **Textiles, Fashion, and Apparel**

- 16. Integrate knowledge, skills, and practices required for careers in textiles and apparels. **TFA16**
  - 16.1 Analyze career paths within textile apparel and design industries. **TFA16.1**
  - 16.2 Evaluate fiber and textile products and materials. **TFA16.2**
  - 16.3 Demonstrate fashion, apparel, and textile design skills. **TFA16.3**
  - 16.4 Demonstrate skills needed to produce, alter, or repair fashion, apparel, and textile products. **TFA16.4**
  - 16.5 Evaluate elements of textile, apparel, and fashion merchandising. **TFA16.5**
  - 16.6 Evaluate the components of customer service. **TFA16.6**
  - 16.7 Demonstrate general operational procedures required for business profitability and career success. **TFA16.7**